

533,431  
Rec'd PCT/PTO 02 MAY 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number  
WO 2004/051779 A1

(51) International Patent Classification<sup>7</sup>: H01M 8/04, 8/02

[JP/JP]; 6-47-306, Funakoshi-cho, Yokosuka-shi, Kanagawa 237-0076 (JP).

(21) International Application Number:

PCT/JP2003/015325

(74) Agent: GOTO, Masaki; Shoyu-Kaikan, 3-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-0013 (JP).

(22) International Filing Date: 1 December 2003 (01.12.2003)

(81) Designated States (national): CN, KR, US.

(25) Filing Language:

English

(84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

(30) Priority Data:

2002-351174 3 December 2002 (03.12.2002) JP

Published:

— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(71) Applicant (for all designated States except US): NISSAN MOTOR CO., LTD. [JP/JP]; 2, Takara-cho, Kanagawa-ku, Yokohama-shi, Kanagawa 221-0023 (JP).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventor; and

(75) Inventor/Applicant (for US only): SAKAI, Hiromasa



WO 2004/051779 A1

(54) Title: FUEL CELL SYSTEM

(57) Abstract: The fuel cell system comprises a fuel cell (1) that has an electrolyte membrane and generates power by using a fuel gas and an oxidizing agent gas; a storage device (51) for water that humidifies the fuel cell; and a controller (100). The controller (100) judges whether the fuel cell (1) can be humidified by using the water of the storage device (51), and limits the operating temperature of the fuel cell (1) to below a limit temperature that is lower than during normal operation in a case where it is judged that the fuel cell (1) cannot be humidified.